**IN THE CLAIMS:** 

A complete listing of the claims is set forth below. Please amend the claims as

follows:

1. (Currently Amended) A system for distributed automated software

graphical user interface (GUI) testing, comprising:

a centralized test queue operable to store a plurality of software GUI test

instances to be executed by a plurality of <u>parallel</u>, distributed test execution computers,

each distributed test execution computer comprising a client platform and coupled to

one or more server platforms, the client platforms and server platforms collectively

providing a plurality of client-server combinations against which the software GUI test

instances may be executed; and

a client controller associated with each distributed test execution computer; and

a test server engine operable to, for each distributed test execution computer:

receive a request for a software GUI test instance from a particular

distributed test execution computer in response to completion of a preceding software

GUI test instance by the particular distributed test execution computer;

retrieve a software GUI test instance from the test queue in response to

the request from the particular distributed test execution computer;

communicate the retrieved software GUI test instance to the particular

distributed test execution computer for execution in parallel against a particular client-

server combination using a testing component supported by the particular distributed

test execution computer, the testing component operable to perform automated

software GUI testing and to produce test results for such testing for communication to

the test server engine;

receive a test result for the software GUI test instance from the client

controller associated with the particular distributed test execution computer in response

to execution of the software GUI test instance; and

store the received test result in a test results database, for reporting to one

or more users.

2. (Original) The system of Claim 1, wherein at least one distributed test

execution computer operates at a location geographically remote from the other

distributed test execution computers and from the test server.

3. (Original) The system of Claim 1, wherein the testing component is a

commercial off-the-shelf product.

4. (Original) The system of Claim 1, wherein each software GUI test

instance is an instance of a software GUI test written using a test scripting language

and can be executed using any of the distributed test execution computers, a software

GUI test instance being executed using the particular distributed test execution

computer from which the request initiating retrieval of the software GUI test instance

from the test queue was received.

5. (Original) The system of Claim 1, wherein:

the test server engine is further operable to generate a test results web page

comprising test results for a plurality of software GUI test instances, including the test

result for the most recently executed software GUI test instance, substantially

immediately upon receiving the test result from the particular distributed test execution

computer on which the most recently executed software GUI test instance was

executed; and

the system further comprises a web server operable to communicate the test

results web page for display on a user system to provide substantially real-time test

results reporting.

6. **(Original)** The system of Claim 5, wherein:

each software GUI test instance is an instance of a software GUI test; and

the test results web page comprises consolidated test results for a particular client platform, the consolidated test results indicating test results for each software GUI test for each client-server combination involving the particular client platform.

7. (Original) The system of Claim 5, wherein the test server engine is further operable to receive a user request to execute an instance of a particular software GUI test and to insert the requested software GUI test instance into the test queue according to the user request, the user request being input by selecting the particular software GUI test using the test results web page.

8. (Original) The system of Claim 1, wherein at least some GUI test instances in the test queue have associated priorities, the test server engine operable to retrieve the GUI test instances from the test queue for execution according to their associated priorities.

9. (Original) The system of Claim 1, wherein the test queue comprises a first queue containing higher priority software GUI test instances and a second queue containing lower priority software GUI test instances, the test server engine operable to retrieve higher priority software GUI test instances from the first queue for execution during a first part of a testing period and retrieve lower priority software GUI test instances from the second queue for execution during a second part of the testing period.

10. (Original) The system of Claim 1, wherein the test server engine is operable to re-communicate instances of a software GUI test for execution against all

client-server combinations, according to a rule, in response to receiving one or more

test results for the software GUI test indicating failure.

11. (Original) The system of Claim 1, wherein the test server engine is

operable to detect when the number of software GUI test instances in the test queue is

below a predefined threshold and, in response, to automatically add software GUI test

instances to the test queue.

12. (Currently Amended) The system of Claim 1, further comprising a

wherein the client controller associated with each-distributed test execution computer

and is further operable to automatically install a current software GUI build at each

distributed test execution computer at one or more appropriate times during a testing

period.

13. (Currently Amended) The system of Claim 1, further comprising a

wherein the client controller associated with each distributed test execution computer

and is further operable to automatically reboot each distributed test execution computer

according to a predetermined schedule.

14. (Currently Amended) The system of Claim 1, further comprising a

wherein the client controller associated with each distributed test execution computer

and is further operable to establish communication with the test server engine when the

distributed test execution computer boots up.

- 15. (Previously Presented) The system of Claim 1, wherein each test execution computer operates as an automated test execution robot, repeatedly requesting, receiving, executing, and returning test results for software GUI test instances, automatically and without human intervention, for an extended time period.
- 16. (**Original**) The system of Claim 1, further comprising the distributed test execution computers.

17. (Currently Amended) A method for distributed automated software

graphical user interface (GUI) testing, the method comprising:

maintaining a centralized test queue operable to store a plurality of software GUI

test instances to be executed by a plurality of <u>parallel</u>, distributed test execution

computers, each distributed test execution computer comprising a client platform and

coupled to one or more server platforms, the client platforms and server platforms

collectively providing a plurality of client-server combinations against which the software

GUI test instances may be executed; and

receiving, for each distributed test execution computer, a request for a software

GUI test instance from a particular distributed test execution computer in response to

completion of a preceding software GUI test instance by the particular distributed test

execution computer;

retrieving, for each distributed test execution computer, a software GUI test

instance from the test queue in response to the request from the particular distributed

test execution computer;

communicating, for each distributed test execution computer, the retrieved

software GUI test instance to the particular distributed test execution computer for

execution in parallel against a particular client-server combination using a testing

component supported by the particular distributed test execution computer, the testing

component operable to perform automated software GUI testing and to produce test

results for such testing;

receiving, for each distributed test execution computer, a test result for the

software GUI test instance from a client controller associated with the particular

distributed test execution computer in response to execution of the software GUI test

instance; and

storing, for each distributed test execution computer, the received test result in a

test result database, for reporting to one or more users.

18. (Original) The method of Claim 17, wherein at least one distributed test

execution computer operates at a location geographically remote from the other

distributed test execution computers and from a computer system on which the method

is performed.

19. (Original) The method of Claim 17, wherein the testing component is a

commercial off-the-shelf product.

20. (Original) The method of Claim 17, wherein each software GUI test

instance is an instance of a software GUI test written using a test scripting language

and can be executed using any of the distributed test execution computers, a software

GUI test instance being executed using the particular distributed test execution

computer from which the request initiating retrieval of the software GUI test instance

from the test queue was received.

21. (Original) The method of Claim 17, further comprising:

generating a tests results web page comprising test results for a plurality of

software GUI test instances, including the test result for the most recently executed

software GUI test instance, substantially immediately upon receiving the test result from

the particular distributed test execution computer on which the most recently executed

software GUI test instance was executed; and

communicating the test results web page for display on a user system to provide

substantially real-time test results reporting.

22. (Original) The method of Claim 21, further comprising:

each software GUI test instance is an instance of a software GUI test; and

generating a test results web page comprising consolidated test results for a particular client platform, the consolidated test results indicating test results for each software GUI test for each client-server combination involving the particular client platform.

23. (Original) The method of Claim 21, further comprising receiving a user

request to execute an instance of a particular software GUI test and inserting the

requested software GUI test instance into the test queue according to the user request,

the user request being input by selecting the particular software GUI test using the test

results web page.

24. (Original) The method of Claim 17, wherein at least some software GUI

test instances in the test queue have associated priorities, the method further

comprising retrieving the software GUI test instances from the test gueue for execution

according to their associated priorities.

25. (Original) The method of Claim 17, further comprising:

maintaining a first queue containing higher priority software GUI test instances and a second queue containing lower priority software GUI test instances;

retrieving higher priority software GUI test instances from the first queue for

execution during a first part of a testing period; and

retrieving lower priority software GUI test instances from the second queue for

execution during a second part of the testing period.

26. (Original) The method of Claim 17, further comprising re-communicating

instances of a software GUI test for execution against all client-server combinations,

according to a rule, in response to receiving one or more test results for the software

GUI test indicating failure.

27. (Original) The method of Claim 17, further comprising detecting when the

number of software GUI test instances in the test queue is below a predefined threshold

and, in response, automatically adding software GUI test instances to the test queue.

28. (Currently Amended) The method of Claim 17, further comprising

wherein the client controller further comprises automatically installing a current software

GUI build at each distributed test execution computer at one or more appropriate times

during a testing period.

29. (Currently Amended) The method of Claim 17, further comprising

wherein the client controller further comprises automatically rebooting each distributed

test execution computer according to a predetermined schedule.

30. (Currently Amended) The method of Claim 17, further comprising

wherein the client controller further comprises automatically establishing communication

between the distributed test execution computer and a test server engine when the

distributed test execution computer boots up.

31. (Previously Presented) The method of Claim 17, wherein each test

execution computer operates as an automated test execution robot, repeatedly

requesting, receiving, executing, and returning test results for software GUI test

instances, automatically and without human intervention, for an extended time period.

33. (Original) The software of Claim 32, wherein at least one distributed test

execution computer operates at a location geographically remote from the other

distributed test execution computers and from the software.

34. (Original) The software of Claim 32, wherein the testing component is a

commercial off-the-shelf product.

35. (Original) The software of Claim 32, wherein each software GUI test

instance is an instance of a software GUI test written using a test scripting language

and can be executed using any of the distributed test execution computers, a software

GUI test instance being executed using the particular distributed test execution

computer from which the request initiating retrieval of the software GUI test instance

from the test queue was received.

36. (Original) The software of Claim 32, further operable to:

generate a test results web page comprising test results for a plurality of software

GUI test instances, including the test result for the most recently executed software GUI

test instance, substantially immediately upon receiving the test result from the particular

distributed test execution computer on which the most recently executed software GUI

test instance was executed; and

communicate the test results web page for display on a user system to provide

substantially real-time test results reporting.

37. (Original) The software of Claim 36, wherein:

each software GUI test instance is an instance of a software GUI test; and

further operable to generate a test results web page comprising consolidated test results for a particular client platform, the consolidated test results indicating test results for each software GUI test for each client-server combination involving the particular client platform.

38. (Original) The software of Claim 36, further operable to receive a user request to execute an instance of a particular software GUI test and to insert the requested software GUI test instance into the test queue according to the user request,

the user request being input by selecting the particular software GUI test using the test

results web page.

39. (Original) The software of Claim 32, wherein at least some software GUI

test instances in the test queue have associated priorities and the software is further

operable to retrieve the software GUI test instances from the test queue for execution

according to their associated priorities.

40. (Original) The software of Claim 32, wherein the test queue comprises a

first queue containing higher priority software GUI test instances and a second queue

containing lower priority software GUI test instances, the software is further operable to

retrieve higher priority software GUI test instances from the first queue for execution

during a first part of a testing period and retrieve lower priority software GUI test

instances from the second queue for execution during a second part of the testing

period.

32. (Currently Amended) Software for conducting distributed automated

software graphical user interface (GUI) testing, the software being embodied in

computer-readable media and when executed operable to:

maintain a centralized test queue operable to store a plurality of software GUI

test instances to be executed by a plurality of <u>parallel</u>, distributed test execution

computers, each distributed test execution computer comprising a client platform and

coupled to one or more server platforms, the client platforms and server platforms

collectively providing a plurality of client-server combinations against which the software

GUI test instances may be executed; and

receive, for each distributed test execution computer, a request for a software

GUI test instance from a particular distributed test execution computer in response to

completion of a preceding software GUI test instance by the particular distributed test

execution computer;

retrieve, for each distributed test execution computer, a software GUI test

instance from the test queue in response to the request from the particular distributed

test execution computer;

communicate, for each distributed test execution computer, the retrieved

software GUI test instance to the particular distributed test execution computer for

execution in parallel against a particular client-server combination using a testing

component supported by the particular distributed test execution computer, the testing

component operable to perform automated software GUI testing and to produce test

results for such testing;

receive, for each distributed test execution computer, a test result for the

software GUI test instance from a client controller associated with the particular

distributed test execution computer in response to execution of the software GUI test

instance; and

store, for each distributed test execution computer, the received test result in a

test result database, for reporting to one or more users.

41. (Original) The software of Claim 32, further operable to re-communicate

instances of a software GUI test for execution against all client-server combinations,

according to a rule, in response to receiving one or more test results for the software

GUI test indicating failure.

42. (Original) The software of Claim 32, further operable to detect when the

number of software GUI test instances in the test queue is below a predefined threshold

and, in response, to automatically add software GUI test instances to the test queue.

43. (Currently Amended) The software of Claim 32, further comprising

software associated with each client controller associated with each distributed test

execution computer and operable to automatically install a current software GUI build at

each distributed test execution computer at one or more appropriate times during a

testing period.

44. (Currently Amended) The software of Claim 32, further comprising

software associated with each client controller associated with each distributed test

execution computer and operable to automatically reboot each distributed test execution

computer according to a predetermined schedule.

- 45. (Currently Amended) The software of Claim 32, further comprising software associated with each client controller associated with each distributed test execution computer and operable to automatically establish communication, when the distributed test execution computer boots up, required for the distributed test execution computer to receive software GUI test instances for execution.
- 46. **(Previously Presented)** The software of Claim 32, wherein each test execution computer operates as an automated test execution robot, repeatedly requesting, receiving, executing, and returning test results for software GUI test instances, automatically and without human intervention, for an extended time period.

47. (Currently Amended) A system for distributed automated software GUI

testing, comprising:

means for maintaining a centralized test queue operable to store a plurality of

software GUI test instances to be executed by a plurality of distributed test execution

computers, each distributed test execution computer comprising a client platform and

coupled to one or more server platforms, the client platforms and server platforms

collectively providing a plurality of client-server combinations against which the software

GUI test instances may be executed; and

means for receiving a request for a software GUI test instance from each

particular distributed test execution computer in response to completion of a preceding

software GUI test instance by the distributed test execution computer;

means for retrieving a software GUI test instance from the test queue in

response to the request from the particular distributed test execution computer;

means for communicating the retrieved software GUI test instance to the

particular distributed test execution computer for execution against a particular client-

server combination using a testing component supported by the particular distributed

test execution computer, the testing component operable to perform automated

software GUI testing and to produce test results for such testing;

means for receiving a test result for the software GUI test instance from a client

controller associated with the particular distributed test execution computer in response

to execution of the software GUI test instance; and

means for storing the received test result in a test result database, for reporting

to one or more users.

48. (Cancelled)